

ABSTRACT OF THE DISCLOSURE

Disclosed is a semiconductor manufacturing method whereby reactive gas processing such as selective epitaxial growth can be carried out with high precision by correctly adjusting conditions during processing. Further disclosed are the semiconductor manufacturing method and a semiconductor manufacturing apparatus which can restrict increases in the moisture content, prevent heavy metal pollution and the like, and investigate the correlation between moisture content in the process chamber and outside regions. The moisture content in a reaction chamber and in a gas discharge system of the reaction chamber are measured when a substrate is provided, and the conditions for reactive gas processing are adjusted based on the moisture content. Furthermore, the method comprises a substrate carrying step of measuring the moisture content in the airtight space by means of a first moisture measuring device which is connected to the airtight space, and thereafter, inserting and ejecting the substrate by means of the substrate carrying system, and a gas processing step of performing the reactive gas processing while measuring the moisture content in the reaction chamber by means of a second moisture measuring device, which is connected to the reaction chamber, after the substrate carrying step.